

4 - to obtain secure data exchanges between said interconnected entities ( $U_1$ , 36a-36b, 37a-  
5 37d).

1       5.     Method according to claim 4, characterized in that, said first entity being a  
2     user ( $U_1$ ) of said first system (4, 20), it includes a step for authenticating said user ( $U_1$ )  
3     and in that said IP address is used as data for identifying this user ( $U_1$ ).

1           6.     Method according to claim 5, characterized in that since said  
2     communications take place in data packet mode, said data for identifying a user (*UI*) is  
3     present in encrypted form in conformity with said IPSec protocol, in each of said data  
4     packets.

7. Method according to claim 1, characterized in that said first system (4, 20)  
is connected to a wireless transmission segment (RTT), in that the communications  
between this first system constituting a client system (4, 20) and said second system  
constituting a server system (3, 3') take place in conformity with the so-called WAP  
protocol, and in that it includes the installation in said second system (3, 3') of at least one  
piece of software constituting a WAP server (30) and a second piece of software (32)  
forming a unified interface between said WAP server (30) and at least one application  
(36a-36b, 37a-37d) offering its services to said first entity (U<sub>1</sub>), so that said WAP server  
(30) is integrated into said server system (3, 3') as a web server.

1           8.       Method according to claim 7, characterized in that it includes the  
2 installation in said second system (3, 3') of an additional module (35) for two-way  
3 interface adaptation of structures, which makes it possible to support application  
4 interfaces (33) used by web servers.

1 9. Method according to claim 7, characterized in that it includes the  
2 installation in said first system (4, 20) of a piece of software constituting a client and in  
3 that said piece of software is a WAP browser.

10. Method according to claim 1, characterized in that, said first system being  
a mobile system (25), it includes the assignment to said first system (25) of a temporary

3 - address, and in that it includes a step for dialog between said first system (25) and an  
4 element called a "home agent" (23) connected to said internet network (*it*), which makes  
5 it possible to correlate, at all times, said permanent address assigned to said first entity  
6 ( $U_3$ ) with said temporary address, in conformity with the so-called "mobile IPV6  
7 protocol".

1        11. System architecture for secure communication between first and second  
2 entities interconnected via an internet network, said entities being associated with first  
3 and second computer data processing systems within a set of distributed systems  
4 connected to said internet network, characterized in that said first system (4, 20) is a system  
5 operating in the so-called client mode and said second system (3, 3') is a system  
6 operating in the so-called server mode, in that said first and second entities are pieces of  
7 software (36a-36b, 37a-37d) hosted in said first (4, 20) and second (3, 3') systems and/or  
8 a user ( $U_1$ ) of said connected systems, in that said entities ( $U_1$ , 36a-36b, 37a-37d) are  
9 associated with permanent Internet addresses of the so-called IP type, in that said second  
10 system (3, 3') forming the server comprises at least one piece of software (31) forming a  
11 server (30, 31) and offering the services of at least one application (36a-36b, 37a-37d) to  
12 said first entity ( $U_1$ ), and in that said first (4, 20) and second (3, 3') systems include a  
13 communication protocol stack comprising at least one address layer (44, 390) using said  
14 permanent IP address and a logical layer (45, 391) for the execution of a step for  
15 encrypting, in end-to-end mode in conformity with a given security protocol, data  
16 exchanged between said interconnected entities ( $U_1$ , 36a-36b, 37a-37d).

1           12. Architecture according to claim 11, characterized in that said address layer  
2 (44, 390) conforms to the IPV6 protocol.

1       13. Architecture according to claim 12, characterized in that since said internet  
2 network (*R*) conveys data packets in conformity with the IPV4 protocol, said protocol  
3 stacks of said first (4, 20) and second (3, 3') systems each include a first address layer (44,  
4 390) using said IP address in the IPV6 protocol, and a second address layer (46, 392) in  
5 the IPV4 protocol from which IPV6-compatible addresses are derived, in order to obtain  
6 exchanges in the so-called tunnel mode: said logical layers (45, 391) executing an

7 encryption step (45, 37) in favor of said data packets exchanged between said  
8 interconnected entities ( $U_1$ , 36a-36b, 37a-37d).

1 14. Architecture according to claim 11, characterized in that said logical layers  
2 (45, 391) for executing an encryption step conform to the so-called IPSec protocol, used  
3 with the so-called EPS mechanism for identifying information sources, in the so-called  
4 tunnel mode, in order to obtain secure data exchanges between said interconnected  
5 entities ( $U_1$ , 36a-36b, 37a-37d).

1 15. Method according to claim 11, characterized in that said first system  
2 (4, 20) is connected to a wireless transmission segment (RTT), in that the communications  
3 between this first system (4, 20) constituting a client system and said second system (3,  
4 3') constituting a server system take place in conformity with the so-called WAP protocol,  
5 and in that said second system (3, 3') includes at least a first module constituting a WAP  
6 server (30) and a second module (32) forming a unified interface between said WAP  
7 server (30) and at least one application (36a-36b, 37a-37d) offering its services to said  
8 first entity ( $U_1$ ), so that said WAP server (30) is integrated into said server system (3, 3')  
9 as a web server.

1 16. Architecture according to claim 15, characterized in that said second  
2 system (3, 3') includes at least one additional module (38a-38b) for the two-way  
3 conversion of data packets of structures in conformity with said web or WAP protocols.

1 17. Architecture according to claim 15, characterized in that said first system  
2 is a mobile telephone terminal (20, 4) in the so-called GSM standard, in that it includes a  
3 WAP type browser constituting a client, and in that it includes a display screen for  
4 displaying pages in a language of the so-called WML type.

1 18. Architecture according to claim 15, characterized in that said first system  
2 is a mobile telephone terminal in the so-called GPRS standard, in that it includes an  
3 Internet browser constituting a client, and in that it includes a display screen for  
4 displaying pages in a language of the so-called WML type.